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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/980,665	11/15/2001	Peter Lohberg	AP9641	6599
10291	7590	04/30/2004	EXAMINER	
RADER, FISHMAN & GRAUER PLLC 39533 WOODWARD AVENUE SUITE 140 BLOOMFIELD HILLS, MI 48304-0610			PATIDAR, JAY M	
			ART UNIT	PAPER NUMBER
			2862	

DATE MAILED: 04/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/980,665	Applicant(s) LOHBERG, PETER	
	Examiner Jay M. Patidar	Art Unit 2862	<i>[Signature]</i>

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on 05 January 2004.

2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) 10-14 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) 10-14 is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892) 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____. 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) 6) <input type="checkbox"/> Other: _____.
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1. This communication is in response to applicants amendment filed on January 5, 2004.

2. The title of the invention is still not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. The instant invention is directed to a housing for sensor and its processing circuits.

3. The disclosure is objected to because of the following informalities: The specification is confusing for not clearly disclosing the instant invention. The instant invention is directed to the first housing for the sensor, a second housing for the processing circuits and electrical connection there between.

Appropriate correction is required.

4. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the housing coupled to a side wall of a vehicle tire; sensor in first housing; processing circuits in a second housing; a port in a second housing as set forth in claim 10; port designed as a 2-wire connection as set forth in claim 11; rotating member in claim 14 must be shown or the feature(s) canceled from the claim(s).

No new matter should be entered.



A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

5. Claims 10-14 are objected to because of the following informalities:

In claim 10, it is vague as to where an analog amplifier is connected; what provides a current output to an amplifier; how amplifier provides an alternating current with a sinusoidal shape;

In claim 11, the purpose of the pins is not clearly defined;

In claim 12, the phrase "designed as" should be deleted;

In claim 13, what is meant by "preloading the magneto-electric converter element";

In claim 14, last line, "members" should be ---member---; what is a rotating member.

Appropriate correction is required.

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior

art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 10-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Loreck et al. (DE 196 34 715) in view of Adachi.

As to claim 10, Loreck discloses a sensor arrangement with a first housing 12 for the accommodation of at least one converter element; a second housing 13 for a signal processing unit; at least 4-pole connection (14) between the first and the second housing and the second housing includes a port for a control device and the signal processing circuit in the second housing outputs the signal related to the speed of the encoder (Note Fig. 4a). Loreck shows the output signals being digital (pulses) instead of sinusoidal signals. The use of such sensor arrangement as SWT sensor is an intended manner of operation. It is general practice in the art to use an amplifier with the magnetic sensor so that it would generate sinusoidal signals when the rotation of the encoder occurs. The magnetic field sensor would generate sinusoidal signals when rotor rotates. This is exemplified by Adachi in figure 1. The sinusoidal signals are generated at S in figure 1 (Note figs. 1, 2a, 2b, 4a, 4b). (Also, note Gokhale at Col. 1, lines 8+). As applicant argues about housing converter or circuits in the housings, it would be common approach by the artisan depending on its suitability to mount converter or circuits either in the first housing or second housing or wherever he wants

since the mounting of these elements in either housing would generate the same results as long as they are electrically connected with each other. Therefore, it is up to the artisan where to install what. The use such structure for the sidewall torsion sensor is considered an intended manner of operation. This is clearly admitted by applicant on numerous places in the specification. e.g. page 1, para 4. The use of this structure exclusively for SWT is not critical to the invention. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have included an amplifier with sensor in Loreck as shown by Adachi to generated the frequency related signals to measure the speed of the encoder which is also well known in the art.

As to claims 11-13, Loreck shows terminals K3-K5; sensor being magneto-electric converter (Col. 5, line 7); and a magnet (Note Fig. 4a, col. 5, lines 10+).

As to claim 14, the converter in figure 4a is used to measure the speed of the rotating member (e.g. Col. 3, line 7).

7. Applicant's arguments filed on January 5, 2004 have been fully considered but they are not persuasive as explained above.

8. Applicant's amendment necessitated the new ground(s)/position of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jay M. Patidar whose telephone number is 703-308-6723. The examiner can normally be reached on M-Thur 7:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nancy Le can be reached on 703-308-0750. The fax

phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Jay M. Patidar
Primary Examiner
Art Unit 2862

April 28, 2004